with an almost overdisciplined—but very useful—chapter by Gastaut and others on non-epileptic episodic phenomena.

The remainder of the volume is largely concerned with a number of studies of sleep in epileptics, most of which are essentially laboratory reports of interest to the student of epilepsy rather than to the general reader. A final chapter reviews briefly the few publications on sleep in mental illness and goes on to give the authors' own experience in a number of patients with various delirious states.

This is a book which can be recommended not only to those whose main interest is in clinical neurophysiology but also to anyone who has an interest in the state in which he spends a great part of his life.

M. V. DRIVER

NEUROSCIENCES RESEARCH SYMPOSIUM SUMMARIES Vol. 1. (An anthology of work session reports from the Neurosciences Research Program Bulletin.) Edited by F. O. Schmitt and T. Melnechuk. (Pp. xx + 570. \$7.50.) Cambridge, Mass. and London: Massachusetts Institute of Technology Press. 1966.

This volume of symposium summaries has been aptly described as an 'interdisciplinary communication'. It contains concise, highly specialized reports from experts in biophysics, chemistry, neuroanatomy, physiology, and psychology on current thinking and experiment in relation to the functions of the central nervous system.

A wide range of topics is covered, ranging from detailed observations on cell structure and metabolism to discussions of the relevance of mathematical theory and computer simulation techniques for problems of memory and information processing.

This succinct form of reporting is particularly valuable for the specialist who wishes to keep abreast of developments in the neurosciences. It provides both a critical appraisal of current theories and original speculations for future experimental enquiry.

LEHRBUCH DER NEUROLOGIE 2nd ed. By Werner Scheid. (Pp. xvi + 776; 266 figures. DM.79.-) Stuttgart: Georg Thieme Verlag. 1966.

This textbook is beautifully bound and produced and superbly illustrated; as a book it is a thing of beauty. As a textbook it is logically though traditionally constructed with successive accounts of individual neurological disorders following upon the usual introductory chapters. These early chapters deal with such topics as history-taking and examination, principles of diagnosis and ancillary investigations; there are also full commentaries upon 'syndromes' of motor weakness, sensory impairment, spinal cord disorders, disorders of speech, of the extrapyramidal and cerebellar systems, of psychopathology, autonomic disorders, and the like. Although lack of familiarity with the language made it difficult for this reviewer to appreciate delicate nuances of meaning or to assess the book's literary merits, it appears to be both comprehensive and clear, and to compare favourably with some of the comparable medium-sized text in the English language. It should find favour with German-

speaking physicians and neurologists though it is plainly too weighty for the undergraduate. A short but well-selected bibliography is given at the end of the volume and is divided into sections, each referring to individual parts of the text. Not unnaturally, references to the German literature predominate but some leading works in the American, British, and French sources are included. There is a very complete index.

PATHOLOGY OF THE SPINAL CORD By J. Trevor Hughes. (Pp. ix + 196; 60 figures. 40s.) London: Lloyd-Luke (Medical Books) Ltd. 1966.

This short textbook aims to provide a concise descriptive account of spinal cord pathology for neurologists, neurosurgeons, and others who care for paraplegic patients. These readers will find this a helpful work. Space is given to the commoner disorders, and especially to those fields in which the author has made original contributions. Other subjects are touched on with copious references. They may find it frustrating to read statements such as 'the controversy about nomenclature and the separation into two types . . . has been admirably reviewed by . . .' without any indication of the nature of the controversy or the conclusion of the reviewers.

Some guidance on the differential diagnosis of motor neurone disease would be useful, and carcinomatous myelopathy should find a place. Spinal cord injury is well covered, but there is no account of Schneider's central cervical cord injury. Hydatid disease is discussed on page 88 but the heading has been omitted and there is no reference to it in the index.

The book is unlikely to meet the needs of the general pathologist trying to identify an unfamiliar disease of the spinal cord, and will not satisfy the neuropathologist, but the selection is, on the whole, judicious for the reader-ship aimed at.

J. A. SIMPSON

SPEECH DISORDERS: APHASIA, APRAXIA AND AGNOSIA 2nd ed. By Lord Brain. (Pp. 201; 25 figures. 47s. 6d.) London: Butterworths. 1965.

This new and slightly enlarged edition of Lord Brain's admirable little book will be welcomed by all interested in aphasia and kindred disorders. The main changes comprise a new chapter on current views on aphasia, which provides a useful survey of the ideas of Bay, Luria, and others all too little known in Great Britain, and an expansion of the chapter on handedness and cerebral dominance to take account of important recent studies, in particular those utilizing the technique of intracarotid injection of sodium amytal. The chapter on language and speech disorders in children has been re-written; developmental dyslexia, for instance, now receives more adequate coverage. Unfortunately, little attempt has been made to bring the chapters on agnosia and apraxia more fully up to date or to indicate lines along which the study of these disorders might profitably be taken. One or two small errors in the first edition, *e.g.*, Malaas for Morlaas, remain uncorrected.

It has been said of the study of aphasia that never in the history of medical endeavour have so many words been written about so few. It is to Lord Brain's eternal

credit to have shown that the subject can be presented simply and concisely and discussed with elegance and clarity.

MINNESOTA TEST FOR DIFFERENTIAL DIAGNOSIS OF APHASIA
By Hildred Schuell. (Pp. 106; 100s. per set.)
Minneapolis: University of Minnesota Press. 1966.

Many students of the brain consider that patients with disturbances of language function caused by focal brain disease provide wonderful opportunities to study the organization of cerebral mechanisms. The Minnesota battery of tests is well known to students of aphasia and here these (their latest revisions) are made available to all in a collection of the monograph, packs of test cards, and 25 score sheets.

The publication of this material is a most useful service to the neuropsychologist. The emphasis in the monograph is on diagnosis of the type of aphasia, but as this is often a somewhat academic exercise the reviewer expects these methods in their full complexity to appeal particularly to the research worker.

INFANTILE AUTISM By Bernard Rimland. (Pp. xi + 282. 36s.) London: Methuen. 1965.

The initial part of this book reviews the biological and psychological features of infantile autism. Psychodynamic explanations are attacked more vigorously than is necessary in this country where the constitutional aspects of psychiatric disorders are customarily given more attention than in the United States. It is suggested that the characteristic personality of parents of autistic children, intelligent, detached, cold, and free from psychiatric illness, is of significance not in psychogenesis but in determining a specific neurological abnormality, namely, an impairment of the hypothesized function of the reticular system as a coding system. It is suggested that in the autistic child only a small range of memory engrams is activated by sensory stimuli, with a corresponding limited range of responses: generalization and abstract thought are thereby rendered impossible. The remainder of the book develops and extends this concept of the function of the reticular system and its relevance to a theory of behaviour.

The author's conviction that infantile autism has a constitutional rather than a psychological cause leads him to be somewhat uncritical in accepting evidence in support of his theory: however, this approach is a novel and refreshing counterbalance to the psychodynamic one, and is a salutary reminder of the importance of a wide biological attack on all psychiatric problems, even those in which psychogenesis appears most plausible.

THE PHONETIC TEST AND THE MEASUREMENT OF HEARING
By J. C. Lafon. (Pp. xii + 247; 28 figures. 57s. 6d.)
Eindhoven: Centrex. 1966.

An interesting book, not always quite happily translated from the French, which imports into audiometry and its clinical applications a number of fresh elements from contemporary phonetics and psycholinguistics. It is a pity that the language is not always as precise as

the basic ideas require. But these ideas will have increasingly to be reckoned with in future by all who have to do with auditory function.

TEN STUDIES INTO PSYCHOPATHIC PERSONALITY By Michael Craft. (Pp. 133, 25s.) Bristol: John Wright and Sons Ltd. 1965.

This little book, competently written, contains much data about the problem of psychopathy. Interesting experiments of treatment and follow-up are described and attempts are made to assess factors relevant to the development of psychopathic personality disorders and devise prediction indices of outcome. The author states that the studies illustrate the continuum in personality disorder from normality through minor and common behaviour disorder to the most extreme and uncommon psychopath. His approach to eventual outcome is optimistic although adequate evidence is not cited to substantiate this statement. Dr. Craft does, however, admit that conclusions about treatment procedure require more stringent and longer term programmes and research assessment. There is an extensive bibliography and comments are well drawn from the field of previous investigators and the author's own investigative experience.

BERTRAM MANDELBROTE

STUDIES ON PSYCHOSIS By T. Freeman, J. Cameron, and A. McGhie. (Pp. vii + 245. 35s.) London: Tavistock Publications. 1965.

Despite Freud's cautionary pronouncements psychoanalysts have continued to focus their attention on the functional psychoses, and especially the schizophrenias. Some analysts have tried to explain these conditions, others to treat them. In this book the principal author professes himself to be chiefly interested in research. Many painstaking hours have gone into the detailed clinical material provided in the text, but while Dr. Freeman and his co-authors are evidently aware of other methods of investigation the case they advance for psychoanalysis as a research tool remains unconvincing on the evidence presented here.

PATTERNS OF MEANING IN PSYCHIATRIC PATIENTS By I. M. Marks. (Pp. xvi + 144; illustrated. 55s.) London: Oxford University Press. 1965.

The nature of psychological malfunction in mental illness constitutes a difficult but potentially rewarding field of study. This book reports on an investigation designed to examine the possible relationships between the abnormal behaviour of obsessional and psychopathic patients and the meaning they attach to certain concepts. The technique of the semantic differential was applied to both groups of patients and to a control sample of subjects free from psychiatric disorder. Dr. Marks presents the statistical analysis of his complex data clearly and sifts the material with the care we have come to expect from the authors contributing to this series of monographs.

DÉSAlFFÉRENTATION EXPÉRIMENTALE ET CLINIQUE Symposium Bel-Air II, Genève, Septembre 1964. Edited by Professeur J. de Ajuriaguerra. (Pp. 344; illustrated 80Fr.) Paris: Masson and Cie. 1965.